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Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in this application.

1. *(Withdrawn)* A variable-optical-characteristic optical element characterized by using at least two selected from the group consisting of electrostatic force, electromagnetic force, a piezoelectric effect, magnetostriction, a fluid pressure, a magnetic field, an electromagnetic wave, a temperature change, and a photomechanical effect.
2. *(Withdrawn)* A variable mirror characterized by using at least two selected from the group consisting of electrostatic force, electromagnetic force, a piezoelectric effect, magnetostriction, a fluid pressure, a magnetic field, an electromagnetic wave, a temperature change, and a photomechanical effect.
3. *(Withdrawn)* A variable-focus lens characterized by using at least two selected from the group consisting of electrostatic force, electromagnetic force, a piezoelectric effect, magnetostriction, a fluid pressure, a magnetic field, an electromagnetic wave, a temperature change, and a photomechanical effect.
4. *(Withdrawn)* A variable-optical-characteristic optical element capable of achieving high-precision optical deflection by combined use of two or more different driving methods to change optical deflection thereof, wherein each driving method is capable of achieving a different optical deflection change.
5. *(Currently Amended)* A variable-optical-characteristic optical unit, comprising:
a variable-focus optical element having a fluid portion, and an electrode adjacent to said fluid portion; and
a power source unit and a driving circuit for driving said variable-optical-characteristic optical unit, wherein:

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said power source unit or driving circuit includes a booster member that is connected to the power source unit and generates a voltage necessary in said driving circuit, wherein the booster member includes a transformer using a coil or a piezoelectric transformer, and

said variable-optical-characteristic optical unit is capable of achieving optical deflection.

6. (*Previously Presented*) A variable-optical-characteristic optical unit according to claim 5, wherein electrostatic force or piezoelectric effect is used for driving said variable-optical-characteristic optical unit.

7. (*Withdrawn*) A variable-optical-characteristic optical element comprising a deformable optical surface and a member for creating a magnetic field, wherein a substrate of said optical surface is made of a magnetostrictive material, and said member is capable of changing an intensity of the magnetic field.

8. (*Withdrawn*) A variable-optical-characteristic mirror that uses a magnetostrictive material and comprising a deformable optical surface.

9. (*Withdrawn*) A variable-optical-characteristic lens comprises a deformable optical surface and a member for creating a magnetic field, wherein a substrate of said optical surface is made of a magnetostrictive material, and said member is capable of changing an intensity of the magnetic field.

10. (*Withdrawn*) A variable-optical-characteristic optical element comprising a deformable optical surface, wherein a transparent member for covering a whole deformable portion thereof is provided near said optical surface.

11. (*Withdrawn*) A variable-optical-characteristic optical element according to claim 10 which is a variable mirror or a unifocus mirror.

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12. *(Withdrawn)* A variable-optical-characteristic optical element comprising a light source for driving said variable-optical-characteristic optical element, wherein a substance having a photomechanical effect is used for deformation of an optical surface, and optical deflection changes by deformation of the optical surface.
13. *(Withdrawn)* A variable-focus lens comprising a light source for driving said varifocal lens, wherein a substance having a photomechanical effect is used for deformation of an optical surface, and optical deflection changes by deformation of the optical surface.
14. *(Withdrawn)* A variable mirror characterized by using a photomechanical effect.
15. *(Withdrawn)* A variable-optical-characteristic optical element characterized by having at least two different kinds of light sources and using a photomechanical effect.
16. *(Withdrawn)* An optical apparatus comprising a variable-optical -characteristic optical element, wherein said variable-optical-characteristic optical element comprises an optical surface, and a space that faces a whole portion thereof that is to be deformed is closed up with a transparent member and a mechanical member, which is characterized in that the variable-optical-characteristic optical element is a variable mirror.
17. *(Withdrawn)* An optical-apparatus comprising a variable-optical-characteristic optical element, wherein said variable-optical-characteristic optical element comprises an optical surface, and a space that faces a whole portion thereof that is to be deformed is airtightly closed up with a transparent member and a mechanical member, which is characterized in that the variable-optical-characteristic optical element is a variable mirror.
18. *(Withdrawn)* An optical apparatus according to claim 16, which is characterized by using an air-permeable mechanical member or transparent member.
19. *(Cancelled)*

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20. (*Withdrawn*) An optical apparatus according to claim 18, which is characterized in that the variable-optical-characteristic optical element is a variable mirror.

21. (*Currently Amended*) A variable-optical-characteristic optical unit having a deformable optical surface, comprising:

a variable-optical-characteristic optical unit having said deformable optical surface;
and

a control system for driving said variable-optical-characteristic optical unit, wherein said variable-optical-characteristic optical unit includes a fluid portion for deforming said deformable optical surface and an electrode adjacent to said fluid portion, and said control system includes a booster member that is connected to a power source, and for applying a voltage necessary for driving said variable-optical-characteristic optical unit,

wherein the booster member includes a transformer using a coil or a piezoelectric transformer.

22. (*Previously Presented*) The variable-optical-characteristic optical unit according to claim 21, which is a varifocal lens or a variable mirror.

23. (*Cancelled*)

24. (*Previously Presented*) An imaging system, comprising an image pickup device and an imaging optical system for which a variable-optical-characteristic optical unit as recited in any one of claims 5, 21, and 22 is used.

25. (*Currently Amended*) An imaging system including a display unit, comprising
a variable-focus optical element,
a power source unit and a driving circuit for driving said variable-focus optical element,
a computing unit,

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an image pickup device, ~~and~~
an imaging optical system, wherein said power source unit or said driving circuit includes a booster member that is connected to a power source, and generates a voltage necessary in said driving circuit, and
a display configured to be in communication with and to display an output signal from the variable-focus optical element.

said variable-focus optical element is capable of achieving optical deflection,
said computing unit examines a high-frequency component of each image picked up while being defocused, and the position where the high-frequency component reaches a maximum is determined to be an in-focus position, and
said variable-focus optical element is used for autofocusing of said imaging optical system.

26. (*Currently Amended*) ~~A~~ An imaging system including a display unit, comprising
a variable-focus optical element having a deformable optical surface,
a control system for driving said variable-focus optical element,
a computing unit,
an image pickup device, ~~and~~
an imaging optical system, wherein said control system includes a booster member that is connected to a power source, and operable to apply a voltage necessary for driving said variable-focus optical element, and
a display configured to be in communication with and to display an output signal from the variable-focus optical element.

said computing unit examines a high-frequency component of each image picked up while being defocused, and the position where the high-frequency component reaches a maximum is determined to be an in-focus position, and
said variable-focus optical element is used for autofocusing of said imaging optical system.

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27. *(Withdrawn)* The variable-optical-characteristic optical element according to claim 10 or 11, wherein said transparent member is a lens.
28. *(Withdrawn)* An imaging system, comprising an imaging optical system including a variable-optical-characteristic optical element as recited in claim 10 or 11.
29. *(Withdrawn)* An optical apparatus, comprising a variable-optical-characteristic optical element having a deformable optical surface, wherein a space including a whole deformable portion is closed up with a transparent member and a mechanical member.
30. *(Withdrawn)* An optical apparatus, comprising a variable-optical-characteristic optical element having a deformable optical surface, wherein a space including a whole deformable portion is airtightly closed up with a transparent member and a mechanical member.
31. *(Withdrawn)* The optical apparatus according to any one of claims 16, 17 and 30, wherein said transparent member has a lens action.
32. *(Withdrawn)* The imaging system according to claim 16 or 17, which comprises an image pickup device and an imaging optical system including said variable-optical-characteristic optical element, wherein autofocusing or zooming is carried out by deformation of said optical surface.
33. *(Withdrawn)* The imaging system according to any one of claims 16, 17 and 30, which comprises an image pickup device and an imaging optical system including said variable-optical-characteristic optical element, wherein a contrast type of autofocusing is carried out by deformation of said optical surface.
34. *(Withdrawn)* The optical apparatus according to any one of claims 16, 17 or 30, which comprises a display device.

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35. (*Withdrawn*) The optical apparatus according to any one of claims 16, 17 or 30, which comprises a lookup table for deforming the optical surface of said variable-optical-characteristic optical element.

36. (*Withdrawn*) The optical apparatus according to any one of claims 16, 17 or 30, which comprises a plurality of said variable-optical-characteristic optical elements, wherein zooming is carried out.

37. (*Withdrawn*) The optical apparatus according to any one of claims 16, 17 or 30, which is a cellular phone.

38.-39. (*Cancelled*)

40. (*Previously Presented*) A cellular phone having said imaging system as recited in claim 24.

41. (*Previously Presented*) A cellular phone having said imaging system as recited in claims 25 or 26.